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10/044,091	01/10/2002	Stacey Secatch	10011023-1	7569

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EXAMINER	
NGUYEN, TANH Q	

ART UNIT	PAPER NUMBER
2182	6

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/044,091	SECATCH ET AL.	
	Examiner	Art Unit	
	Tanh Q. Nguyen	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04/05/04*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The amendment to the specification filed April 05, 2004 has not been entered because there is no paragraph starting on line 16 of page 6 and ending on line 26 of page 6, and because there is no three paragraphs starting on line 14 of page 6 and ending on line 17 of page 7 in the original disclosure.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by **Bentz (PN US 2003/0034797 A1)**.

4. As per claim 1, **Bentz** teaches a non-destructive read FIFO [202, FIG. 2], the non-destructive read FIFO being configured to enable data that has been read from an address in the FIFO in a first read cycle to be re-read from the same address in the FIFO in a subsequent read cycle ([0006], lines 8-24).

5. As per claims 2-8, Bentz teaches that when the FIFO is full ([0019], lines 5-9), data stored at the addresses in the FIFO will be read out of the FIFO multiple times in a sequence in which the data was written into the FIFO ([0031], [0032]); it is further noted that when fifoEntry1 is set to the correspond to the first address of the FIFO and fifoEntry2 is set to correspond to the last address of the FIFO, the full signal would be asserted when data are stored in all of the addresses of the FIFO – claim 2;

that the number of times [number_of_repeats, FIG. 4] that data stored at the addresses in the FIFO will be read out of the FIFO in the sequence in which the data was written into the FIFO is controlled by a source external to the FIFO ([0031], [0032]) – claim 3;

that the non-destructive read FIFO is used in implementing programming looping constructs ([0005], lines 9-11; [0031], lines 1-3), hence the non-destructive read FIFO being within a processor, and wherein the data stored at addresses in the FIFO corresponds to a subroutine of instructions [FIG. 4, inner loop] that is to be executed a plurality of times [number_of_repeats, FIG. 4] by the processor, the processor comprising logic corresponding to said external source that controls the number of times ([0031], lines 24-26) the data stored at the addresses in the FIFO is read out of the FIFO in the sequence in which the data was written into the FIFO ([0031], [0032]) – claim 4;

that the FIFO comprises a write signal input [204, 214, FIG. 2], a read signal input [206, 216, FIG. 2], a write clear input [208, FIG. 2] and a read clear input [222, FIG. 2], the FIFO comprising a full flag output [210, FIG. 2] and an empty flag output

[212, FIG. 2] wherein each time the subroutine of instructions is read out of the FIFO, the read clear signal is asserted, thereby causing a read address pointer of the FIFO to be reset to a first address at which a first instruction of the subroutine of instructions was written (when i is less than number_of_repeats [FIG. 4], signal 222 is asserted each time the subroutine of instructions is read out of the FIFO, and when repeat signal 222 is asserted, the read address pointer of the FIFO is reset to a first address at which a first instruction of the subroutine of instructions was written – [0031], [0032]), and wherein after the subroutine of instructions has been read out of the FIFO a preselected number of times [number_of_repeats, FIG. 4], an empty flag is set (in the context of implementing programming looping constructs of FIG. 4, when the subroutine of instructions has been read out of the FIFO a preselected number of times ([0031], lines 24-26), rereading data is no longer desired, the release signal is asserted causing the release pointer to be incremented with the read pointer ([0034], lines 13-15; [0024]; [0025], lines 1-10): when this happens, the read pointer and the release pointer catch up with the write pointer so the FIFO is now empty, accordingly the empty signal is asserted (claim 24); [0025], lines 10-13), which prevents any more of the instructions from being read out of the FIFO until the FIFO has been filled with new data – claim 5;

that the non-destructive read FIFO comprises write logic and read logic [control logic, FIG. 2; [0018], lines 17-21], the write logic comprising write address incrementer logic and write address comparison logic, the write address incrementer logic incrementing the write address each time data is written to an address in the FIFO, the

write address comparison logic comparing the incremented write address to a preselected number (release pointer, hence a number corresponding to the number of instructions in a loop), wherein when the incremented write address is determined by the write address comparison logic to be equal to the preselected number, a full flag is set and no more data is written to the FIFO ([0019], lines 4-9; [0015], lines 30-41, lines 18-20; [0018], lines 2-5); it is further noted that with respect to [0031] and [0032], when fifoEntry1 is set to the correspond to the first address of the FIFO and fifoEntry2 is set to correspond to the last address of the FIFO, the full signal would be asserted when data are stored in all of the addresses of the FIFO: in this case the preselected number represents the capacity (or the number of addresses) in the FIFO – claim 6.

that the non-destructive read FIFO comprises write logic and read logic [control logic, FIG. 2; [0018], lines 17-21], the read logic comprising read address incrementer logic and read address comparison logic, the read address incrementer logic incrementing the read address each time data is read from an address in the FIFO ([0015], lines 30-41), the read address comparison logic comparing the incremented read address to a preselected number (with respect to [0031] and [0032], when fifoEntry1 is set to the correspond to the first address of the FIFO and fifoEntry2 is set to correspond to the last address of the FIFO, the preselected number would correspond to the number of addresses in the FIFO) and to a current write address - Bentz's FIFO incorporates the functionalities of a conventional FIFO ([0018], lines 2-5) and is used to transfer both data within a loop and outside a loop [FIG. 3], [0022]-[0025], hence includes a comparison logic comparing the incremented read address to

a current write address to allow read and write to the FIFO to be done concurrently as long as the read pointer does not advance in front of the write pointer - wherein when the incremented read address is determined by the read address comparison logic to be equal to the preselected number or to be greater than the current write address, an empty flag is set and a determination is made as to whether the read address should be reset to a first address at which data was written to in the FIFO ([0015], lines 27-41; [0018], lines 2-5) – claim 7;

that when a source external to the FIFO determines that the condition of whether the incremented read address is equal to the preselected number or greater than the current write address has been true a preselected number of times, the external source prevents additional reads of the data from the FIFO from occurring until the FIFO has been filled with new data and a full flag has been set (in the context of implementing programming looping constructs of FIG. 4, when the subroutine of instructions has been read out of the FIFO a preselected number of times ([0031], lines 24-26), rereading data is no longer desired, the release signal is asserted causing the release pointer to be incremented with the read pointer ([0034], lines 13-15; [0024]; [0025], lines 1-10): when this happens, the read pointer and the release pointer catch up with the write pointer so the FIFO is now empty, accordingly the empty signal is asserted (claim 24); [0025], lines 10-13), which prevents any more of the instructions from being read out of the FIFO until the FIFO has been filled with new data) – claim 8.

6. As per claims 9-12, see the rejections to claims 4-8 above.

7. As per claim 13, Bentz teaches a method [FIG. 4] for reading data values stored at addresses in a FIFO out of the FIFO in a manner that does not destroy the stored data values so that the stored data values can be re-read from the FIFO in a same sequence in which the data values were stored in the FIFO a multiplicity of times (see the rejections to claims 1-2 above), the method comprising the steps of:

storing data values at addresses in the FIFO ([0032], lines 3-5);

when an empty flag has not been set and a read signal is asserted, reading the data values out of the FIFO in a same sequence in which the data values were stored in the FIFO ([0032], lines 5-11);

when all of the data values have been read out of the FIFO, determining whether the data values should again be read out of the FIFO in the sequence in which the data values were stored in the FIFO ([0031], lines 24-26); and

if a determination is made that the data values should again be read out of the FIFO, reading the data values out of the FIFO in the sequence in which the data values were written into the FIFO ([0032], lines 11-16).

8. As per claims 14-16, see rejections to claims 13, 3-5 above.

Response to Arguments

9. The declaration filed on April 05, 2004 under 37 CFR 1.131 has been considered but is ineffective to overcome the Bentz reference.

10. Applicant indicated in item 1 of the declaration, that the declaration is to establish

completion of the invention of this application in the United States at a date prior to August 20, 2001, that is the effective date of the prior art patent publication No. 2003/0034797 that was cited by the examiner.

Applicant also indicated in item 5 of the declaration, that a statement establishing the diligence of the applicant from the time of their conception, to time just prior to the date of the reference, up to filing of the application is attached.

Since completion of the invention is understood as conception and reduction to practice, it appears that item 5 contradicts item 1 (i.e. the invention was not completed prior to August 20, 2001 - the effective date of the reference).

Based on the nature of the evidence supplied, it appears that applicant is relying on conception prior to the effective date of the reference, followed by diligence until the US filing date.

11. The evidence submitted is insufficient to establish a conception of the invention prior to the effective date of the Bentz reference. While conception is the mental part of the inventive act, it must be capable of proof, such as by demonstrative evidence or by a complete disclosure to another. Conception is more than a vague idea of how to solve a problem. The requisite means themselves and their interaction must also be comprehended. See *Mergenthaler v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897). Per MPEP 715,

> Evidence in the form of exhibits may accompany the affidavit or declaration. Each exhibit relied upon should be specifically referred to in the affidavit or declaration, in terms of what it is relied upon to show.
>
> A general allegation that the invention was completed prior to the date of the reference is not

sufficient. Ex parte Saunders, 1883 C.D. 23, 23 O.G. 1224 (Comm'r Pat. 1883).

A declaration by the inventor to the effect that his or her invention was conceived or reduced to practice prior to the reference date, without a statement of facts demonstrating the correctness of this conclusion, is insufficient to satisfy 37 CFR 1.131.

Vague and general statements in broad terms about what the exhibits describe along with a general assertion that the exhibits describe a reduction to practice "amounts essentially to mere pleading, unsupported by proof or a showing of facts" and, thus, does not satisfy the requirements of 37 CFR 1.131(b). In re Borkowski, 505 F.2d 713, 184 USPQ 29 (CCPA 1974). Applicant must give a clear explanation of the exhibits pointing out exactly what facts are established and relied on by applicant. 505 F.2d at 718-19, 184 USPQ at 33.

12. The declaration amounts to a mere allegation of completion and contains no specific recitation of facts by the inventor showing that the invention was conceived or reduced to practice prior to the reference date, therefore does not support conception of the claimed invention.

The declaration merely states "SEE APPENDIX", and "from the documents and/or models, it can be seen that the invention in this application was made at least by the date of June 27, 2001, which is a date earlier than the effective date of the reference". There is nothing in the declaration that establishes evidence of conception of the claimed invention - as applicant has failed to make a positive statement on the declaration to establish the date of conception of this application being a date earlier than the effective date of the reference (note that "it can be seen that the invention in this application was made" conveys nothing more than a general allegation of completion, and therefore is not a positive statement to establish the date of conception of this application on the declaration).

Furthermore, there is nothing on the declaration that even identifies the exhibits

in the APPENDIX. Applicant did not give a clear explanation of the exhibits on the declaration pointing out exactly what facts are established and relied on. For example, there is no explanation of the exhibits to support the limitation "wherein after the subroutine of instructions has been read out of the FIFO a preselected number of times, an empty flag is set, which prevents any more of the instructions from being read out of the FIFO until the FIFO has been filled with new data" of claim 5.

13. The evidence submitted is further insufficient to establish a conception of the invention prior to the effective date of the Bentz reference, even if supported by a proper declaration. Per MPEP 715,

> when reviewing a 37 CFR 1.131 affidavit or declaration, the examiner must consider all of the evidence presented in its entirety, including the affidavits or declarations and all accompanying exhibits, records and "notes".

Accordingly, the examiner considered the APPENDIX, and noted the followings.

The APPENDIX contains

a. a STATEMENT ESTABLISHING DILIGENCE (3 pages),

b. an INVENTION DISCLOSURE (3 pages)

c. sketches (4 pages)

The verbal disclosures on page 3 of the INVENTION DISCLOSURE are not sufficiently clear to indicate definite conception of the claimed invention (for example, there is nothing in the verbal disclosures to support the limitation "the read address comparison logic comparing the incremented read address to a preselected number and to a current write address, wherein when the incremented read address is

determined by the read address comparison logic to be equal to the preselected number or to be greater than the current write address, an empty flag is set" of claim 7. Page 1 of the INVENTION DISCLOSURE further indicates that the invention was not described in a lab book or other record as of the execution date of INVENTION DISCLOSURE, which is earlier than the effective date of the reference.

The sketches have a November 8, 2001 date - which is a date later than the effective date of the reference. Since the INVENTION DISCLOSURE indicates that the invention was not described in a lab book or other record as of the execution date of INVENTION DISCLOSURE, the sketches must have a date later than the execution date of INVENTION DISCLOSURE. Without any other evidence, the sketches can only be interpreted as having the November 8, 2001 date.

Therefore only page 1 of 3 through page 3 of 3 of the INVENTION DISCLOSURE can be used to establish conception.

It is also noted that the sketches and the verbal disclosures on page 3 of the INVENTION DISCLOSURE, together, appear not sufficient to support all the claimed limitations (e.g. the limitation "wherein after the subroutine of instructions has been read out of the FIFO a preselected number of times, an empty flag is set, which prevents any more of the instructions from being read out of the FIFO until the FIFO has been filled with new data" of claim 5).

The STATEMENT ESTABLISHING DILIGENCE is discussed in the following paragraph, as it does not pertain to establishing the conception date of the invention.

14. Per MPEP 715.07(a),

In determining the sufficiency of a 37 CFR 1.131 affidavit or declaration, diligence need not be considered unless conception of the invention prior to the effective date is clearly established, since diligence comes into question only after prior conception is established. Ex parte Kantor, 177 USPQ 455 (Bd. App. 1958).

However, in the interest of compact prosecution, the examiner notes that the evidence submitted is insufficient to establish diligence from a date prior to the effective date of the Bentz reference (August 20, 2001) to the US filing date of this application (January 10, 2002), because there are some basic deficiencies in the STATEMENT ESTABLISHING DILIGENCE. E.g. applicant merely provides an account of activities occurring between June 22, 2001 and January 10, 2002, without being specific as to dates and facts, therefore amounting to a mere pleading of diligence (per MPEP 2138.06, diligence requires that applicants must be specific as to dates and facts)

Furthermore, the STATEMENT ESTABLISHING DILIGENCE is not executed under Section 1001 of Title 18 of the United States Code; and the STATEMENT ESTABLISHING DILIGENCE contains numerous incorrect facts, e.g. the invention disclosure document being dated and executed by the inventors (Secatch is the only inventor dating and executing the document), or the invention disclosure document including drawings (as noted in paragraph 13 above).

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanh Quang Nguyen whose telephone number is (703) 305-0138, and whose e-mail address is tanh.nguyen36@uspto.gov. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin, can be reached on (703) 308-3301. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306 for After Final, Official, and Customer Services, or (703) 746-5672 for Draft to the Examiner (please label "PROPOSED" or "DRAFT").

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TQN
June 24, 2004